

## ABSTRACT OF THE DISCLOSURE

A system is described that is broadly directed to a system of integrated circuit components. The system comprises a plurality of nodes that are interconnected by communication links. A random access memory (RAM) is connected to each node.

- 5 At least one functional unit is integrated into each node, and each functional unit is configured to carry out a predetermined processing function. Finally, each RAM includes a coherency mechanism configured to permit only read access to the RAM by other nodes, the coherency mechanism further configured to permit write access to the RAM only by functional units that are local to the node.